

## Product datasheet for **RG204423**

### Kallikrein 7 (KLK7) (NM\_005046) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Kallikrein 7 (KLK7) (NM_005046) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Kallikrein 7
Synonyms:	hK7; PRSS6; SCCE
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG204423 representing NM_005046 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCAAGATCCCTTCTCCTGCCCTGCAGATCCTACTGCTATCCTTAGCCTTGAAACTGCAGGAGAAG  
AAGCCCAGGGTGACAAGATTATTGATGGCGCCCATGTGCAAGAGGCTCCACCCATGGCAGGTGGCCCT  
GCTCAGTGGCAATCAGCTCCACTGCGGAGGCGTCTGGTCAATGAGCGCTGGGTGCTCACTGCCGCCAC  
TGCAAGATGAATGAGTACACCGTGCACCTGGGCAGTGATACGCTGGGCGACAGGAGAGCTCAGAGGATCA  
AGGCCTCGAAGTCAATCCGCCACCCGGCTACTCCACACAGCCCATGTTAATGACCTCATGCTCGTGAA  
GCTCAATAGCCAGGCCAGGCTGTATCCATGGTGAAGAAAGTCAAGCTGCCCTCCCGCTGCGAACCCCT  
GGAACCACCTGTACTGTCTCCGGCTGGGCACTACCACGAGCCAGATGTGACCTTTCCCTCTGACCTCA  
TGTGCGTGGATGTCAAGCTCATCTCCCCCAGGACTGCACGAAGGTTTACAAGGACTTACTGGAAAATTC  
CATGCTGTGCGTGGCATCCCCGACTCCAAGAAAAACGCTGCAATGGTACTCAGGGGGACCGTTGGTG  
TGCAGAGGTACCCTGCAAGGTCTGGTGTCTGGGAACTTTCCCTTGGGGCAACCCAATGACCCAGGAG  
TCTACACTCAAGTGTGCAAGTTCACCAAGTGGATAAATGACACCATGAAAAGCATCGC

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >RG204423 representing NM\_005046  
 Red=Cloning site Green=Tags(s)

MARSLLLPLQILLLSLALETAGEEAQGDKIIDGAPCARGSHPWQVALLSGNQLHCGGVLVNERWVLTAAH  
 CKMNEYTVHLGSDTLGDRRAQRIKASKSFRHPGYSTQTHVNDLMLVKLNSQARLSSMVKKVRLPSRCEPP  
 GTTCTVSWGTTTSPDVTFPDLMCVDVKLISPQDCTKVYKDLLENSMLCAGIPDSKKNACNGDSGGPLV  
 CRGTLQGLVSWGTFPWGQPNDPGVYTTQVCKFTKWINDTMKKHR

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_005046

**ORF Size:** 759 bp

**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

**Reconstitution Method:**

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

**RefSeq:** [NM\\_005046.2](#), [NP\\_005037.1](#)

**RefSeq Size:** 1927 bp

**RefSeq ORF:** 762 bp

**Locus ID:** 5650

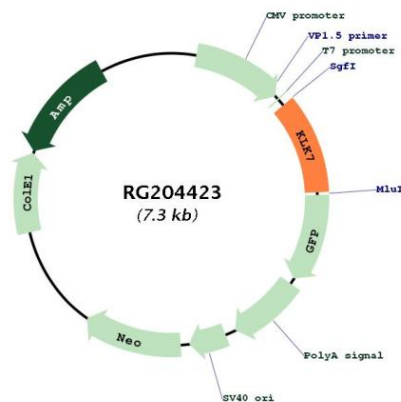
**UniProt ID:** [P49862](#)

**Cytogenetics:** 19q13.41

**Protein Families:** Druggable Genome, Secreted Protein

**Gene Summary:** This gene encodes a member of the kallikrein subfamily of serine proteases. These enzymes have diverse physiological functions and many kallikrein genes are biomarkers for cancer. The encoded protein has chymotrypsin-like activity and plays a role in the proteolysis of intercellular cohesive structures that precedes desquamation, the shedding of the outermost layer of the epidermis. The encoded protein may play a role in cancer invasion and metastasis, and increased expression of this gene is associated with unfavorable prognosis and progression of several types of cancer. Polymorphisms in this gene may play a role in the development of atopic dermatitis. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene, which is one of fifteen kallikrein subfamily members located in a gene cluster on chromosome 19. [provided by RefSeq, May 2011]

### Product images:



Circular map for RG204423